

# Supporting Our Pollinators



2014 Farm Bill Conservation Programs

## OVERVIEW

**P**ollinators are an integral part of our environment and our agricultural systems. They are important in 35 percent of global crop production. Pollinators include bees, butterflies, moths, wasps, flies, beetles, ants, bats and hummingbirds. Native bees are the most important pollinators in North America, but butterflies and other pollinators also play an important role.

The non-native European honey bee is the most important crop pollinator in the United States. Honey bees pollinate an estimated \$15 billion in commercial crops in the U.S. However, the number of honey bee colonies is in decline because of disease and other factors, making native pollinators even more important to the future of agriculture.

California agriculture reaps \$937 million to \$2.4 billion per year in economic value from wild, free-living bee species that serve the critical function of pollinating crops, according to a recent study by scientists at the University of California, Berkeley.

About one-third of the value of California agriculture comes from pollinator-dependent crops, representing a net value of \$11.7 billion per year. Currently, many farmers rent European honeybees to ensure crop pollination. However, it is estimated that wild pollinators residing in California's natural habitats, chiefly rangelands, provide 35-39 percent, or more than one-third, of all pollination "services" to the state's crops.

Undeveloped areas on or close to farms can serve as long-term habitat for native wild pollinators. Protecting, enhancing or providing habitat is the best way to conserve native pollinators and, at the same time, provide pollen and nectar resources that support local honey bees. On farms with sufficient natural habitat, native pollinators can provide all of the pollination for some crops.

Pollinators have two basic habitat needs: a diversity of flowering native or naturalized plants for forage and nesting sites. NRCS can assist landowners with providing adequate pollinator habitat

by, for example, suggesting locally appropriate plants for forage and offering advice on how to provide nesting habitat.

Habitat enhancement for native pollinators and honey bees on farms, especially with native plants, provides multiple benefits. In addition to supporting pollinators, native plant habitat will attract beneficial insects that prey on crop pests and lessen the need for pesticides on the farm. Pollinator habitat can also provide habitat for other wildlife, such as birds, serve as windbreaks, help stabilize the soil, and improve water quality.

## CONSERVATION PLANNING

NRCS conservationists work with farmers and ranchers to develop scientifically sound alternatives for accomplishing their goals and a timeline to implement the conservation practices in the plan. Working with NRCS, landowners can address resource concerns associated with pollinators by following the steps in the NRCS three-phase, nine-step planning process.

**Phase I:** Planners work with interested landowners to better understand pollinator conservation problems and identify existing opportunities to improve pollinator habitat.

**Phase II:** Focuses on the alternatives and site specific measures that protect existing pollinators and their habitats, while recommending appropriate management practices to develop additional areas as suitable pollinator habitat.

**Phase III:** Lays out approaches to implement enhancement, restoration, and management practices identified in the conservation plan, and then monitors the response of pollinators to the management practices implemented.

All information provided to NRCS for conservation planning purposes is strictly confidential. Implementation of the plan may be partially funded through Farm Bill programs, such as the Environmental Quality Incentives Program (EQIP). In California, having a conservation plan will give applicants a higher status when applying for competitive EQIP contracts.



## ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (EQIP)

EQIP can help agricultural producers who want to create, improve or enhance pollinator habitat on farms and ranches. EQIP is a voluntary program that provides financial and technical assistance to agricultural producers to address natural resource concerns and improve soil, water, plant, animal, air and energy-related resources on agricultural land and non-industrial private forestland.

EQIP is a competitive program (one out of three applications is funded on average) and projects are generally ranked for environmental benefits.

When applying for EQIP, especially when applying for the first time, producers should be mindful that they will need to fill out forms providing USDA with information that confirms that they are eligible to participate in these public-funded programs. USDA employees can help with the legal and financial forms that will make it possible to receive funding. Most of these forms are not required for farmers requesting technical assistance.

## CONSERVATION STEWARDSHIP PROGRAM (CSP)

Farmers cannot be paid retroactively through EQIP for conservation work they have already undertaken. However, producers with comprehensive conservation systems on their farm or ranch should be well positioned to participate in the CSP.

CSP provides technical and financial assistance to those producers who already have applied the basic conservation practices and are willing to implement a higher level of conservation on their operations. Producers participating under CSP receive incentive payments for the specified higher levels of conservation treatment.

## REGIONAL CONSERVATION PARTNERSHIP PROGRAM (RCPP)

RCPP is a new, comprehensive and flexible program that uses partnerships to stretch and multiply conservation investments and reach conservation goals on a regional or watershed scale.

Partners participating in RCPP can use their local knowledge and networks to undertake conservation projects by joining with agricultural producers to restore or sustain natural resources such as enhanced wildlife and pollinator habitat.

Eligible producers and landowners of agricultural land and non-industrial private forestland should visit their local USDA Service Center for information on how to enter into conservation program contracts or easement agreements under the framework of an RCPP partnership agreement.

# Conservation Practices Available

NRCS offers technical and financial assistance on several conservation practices useful in supporting pollinators. Here are eight of the most common.



### HEDGEROW PLANTING

Establishing shrubs and flowering plants provides food, cover, and corridors for pollinators and can be effective in an area as narrow as 10 feet in width.



### COVER CROP

Growing legumes and forbs along with grasses can provide pollen for pollinators while also providing other benefits, such as erosion control, improved soil quality, nutrient cycling, and weed suppression.



### CONSERVATION COVER

Maintaining a permanent vegetative cover can provide pollen for pollinators while also reducing soil erosion and improving water, air, and soil quality.



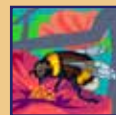
### FIELD BORDER

Placing permanent flowering vegetation at the edge or perimeter of a field provides food and cover for pollinators while also reducing erosion and protecting water quality.



### PEST MANAGEMENT

Using environmentally sensitive prevention, avoidance, and monitoring strategies to manage harmful weeds, insects, and diseases can reduce adverse effects on bees from pesticides.



### CRITICAL AREA PLANTING

Planting flowering vegetation, such as shrubs or legumes, along with grasses improves habitat for pollinators and other wildlife while reducing damage from runoff and stabilizing soil.



### RIPARIAN HERBACEOUS COVER

Establishing flowering plants that are tolerant of intermittent flooding or saturated soils provides pollen, nectar, and safe nesting sites for pollinators.



### UPLAND WILDLIFE MANAGEMENT

Managing upland habitats to include flowering plants can provide pollen and nectar sources for pollinators.

For more information on NRCS Farm Bill conservation programs, visit:

[www.nrcs.usda.gov/wps/portal/nrcs/main/ca/programs/](http://www.nrcs.usda.gov/wps/portal/nrcs/main/ca/programs/)